

Research on Haier Working Capital Management

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Abstract: Working capital is the most dynamic part of a company's capital structure, which can be used to measure a company's short-term solvency. Only by properly managing the working capital can the company finally guarantee the realization of its business objectives. In recent years, Haier Group has formed a set of mature management experience and management methods in the process of capital operation. The road of Haier's working capital management will have beneficial enlightenment and reference for other enterprises. This paper analyzes Haier's working capital management objectives, capital income and expenditure, and production and sales working capital management to obtain certain practical significance.

1. Working Capital Concept

1.1 Working Capital Concept

Working capital is a financial metric which represents operating liquidity available to a business, organisation or other entity, including governmental entities. The working capital cycle is the amount of time it takes to turn the net current assets and current liabilities into cash. The longer the cycle is, the longer a business is tying up capital in its working capital without earning a return on it. Therefore, companies strive to reduce their working capital cycle by collecting receivables quicker or sometimes stretching accounts payable. The concept of working capital is mainly proposed to be able to reflect in detail the entire production process of an enterprise during a certain operation period and the effect of its operation.

1.2 Working capital management

In recent decades, the theory of working capital management has been continuously developed and improved. In China, the management practice of working capital has undergone a process from static to dynamic and from simple to complex. The traditional working capital management mode of enterprises is mainly a simple static mode. It mainly divides working capital into three major parts: inventory, accounts receivable, and accounts payable, and does not include current liabilities. Subsequently, scholars analyzed the management of Chinese companies and divided the management of working capital into three aspects: supply, production, and sales. This allows full integration of working capital management and supply chain. Through the above definition of working capital, it can be concluded that no matter how the working capital is defined, the essence of working capital management is the management of current assets and current liabilities. From a static perspective, the company's working capital management is the management of cash funds, receivables, inventory and payables, and other liquid funds. From a dynamic point of view, the company's working capital management is the control and management of procurement and payment links, sales and collections, and money and capital receipts and payments.

2. Analysis of Risk of Multinational Enterprises' Working Capital Management

2.1 Strategic risks

Strategic risks mainly include: political risks and cultural risks and also covers industrial risks, technical risks and customer risks. Political risk refers to the possibility of causing losses due to the

country's sovereignty in international economic activities. There are many root causes of political risks, including policy instability, regional actions, religiousism, terrorism, increasing geopolitical risks, nationalism, etc.

Cultural risk refers to the risk caused by cultural differences between the host country and the home country. Political and cultural risks have a deep impact on companies and often require companies to respond at a strategic level.

Among the industry risks, the most important risk is the thinning of profits. This may be due to rising R&D spending costs or overcapacity. In addition, under the prevalence of similar products, the increase in suppliers, the increase in strength, and the fact that competitors gradually occupy a certain market share, it may also lead to an increase in the risk of enterprises engaging in the industry.

Technical risk is also one of the major risks that companies face. Due to technological upgrading, the company's own patent expired and other reasons, it may lead to the company's existing technology does not meet the market demand, lack of competitive advantage.

In addition, as a direct source of corporate economic benefits, customer-related risks will also cause great difficulties for the company. For example, changes in customer preferences, customer strength enhancements and other reasons may make customers choose other companies, resulting in the loss of customers. In addition to this, some companies are overly dependent on a few customers and have not further tapped the market, resulting in low independence of the company. Once a small number of customers do not continue to trade with the company, it will bring a fatal blow to the company.

2.2 Financial risks

The financial risks faced by multinational corporations' working capital management mainly include interest rate risk, exchange rate risk, product risk and credit risk. For multinational corporations, the exchange rate risk is most prominent. Exchange rate risk refers to the possibility of loss due to exchange rate changes in economic activities in which economic entities hold or use foreign exchange. There are many factors influencing the exchange rate, such as the relationship between supply and demand of currencies, interest rates, inflation rates, etc. Generally, the exchange rate risks that companies face are trading risks, translation risks and economic risks. Exchange rate risk is the most commonly faced risk in multinational corporations' working capital management. How to avoid and control risks and reduce losses caused by exchange rate fluctuations is an important part of multinational corporations' working capital management.

Interest rate risk refers to the possibility of economic losses due to uncertain changes in interest rates over a certain period of time. The existence of interest rate risk leads to the uncertainty of the interest income and expenditure and the value of the capital market, thus making the financing costs and benefits of the company uncertain. In addition, interest rates are the price of funds. Changes in interest rates will inevitably cause changes in the prices of financial assets. This fluctuation in interest rates causes fluctuations in corporate earnings or asset values (including gains and losses) that create interest rate risks. In terms of working capital management, changes in interest rates directly affect customer settlement. If the interest rate is high, it will be more difficult for the customers to take the money and the cost will be higher, making it's more difficult to bargain.

2.3 Commercial risks

The risks brought by settlement policies changes in settlement policies in commercial risks are the most direct risks for the management of working capital of global companies. According to the international comparison of the investigation of the working capital management of listed companies in China and the operating funds management in the United States, it is found that there are certain differences in the level and stability of settlement policies at home and abroad. In order to weigh the challenges posed by commercial risks to the management of working capital, we must make full use of the advantages brought by settlement policies or avoid the risks caused by settlement policies on the basis of fully understanding the corresponding national settlement policies, so that accounts payable can be maintained at a certain level.

3. Haier Group Working Capital Management

3.1 Qingdao Haier background introduction

Qingdao Haier was established in 1984. Its predecessor was Qingdao Refrigerator General Factory. Qingdao Haier initially produced only refrigerators. After more than 30 years of continuous development, Qingdao Haier's products now cover all aspects of our lives, making it a leading company in China's home appliance industry and enjoying a reputation in the world. The Company mainly engages in research, development, production and sales of home appliances with product portfolios covering refrigerators/freezers, washing machines, air-conditioners, water heaters, kitchen appliance products, small home appliances, U-home smart home business, etc., offering integrated smart home solutions to our consumers, and channel integration service business including logistics, home appliances and other product distribution, after-sale and other value-added business.

Since its establishment, the Company has been upholding the concept of —taking the user as right and ourselves as wrong, while adhering to the spirit of entrepreneurship and innovation and the strategy of keeping up with new developments. Through its persistent efforts and the acquisition of the white goods business of Sanyo of Japan and the household appliances business of GE, the entrusted management of the Fisher & Paykel business in New Zealand, and shares of MABE in Mexico, the Company has established its competitive edge with integrated capabilities in R&D, manufacturing and marketing at home and abroad, realizing a layout deployment and global operation of a world-class brand. In 2017, revenue from overseas operation represented 42% of the total revenue while near 100% of the revenue was generated from self-owned brands.

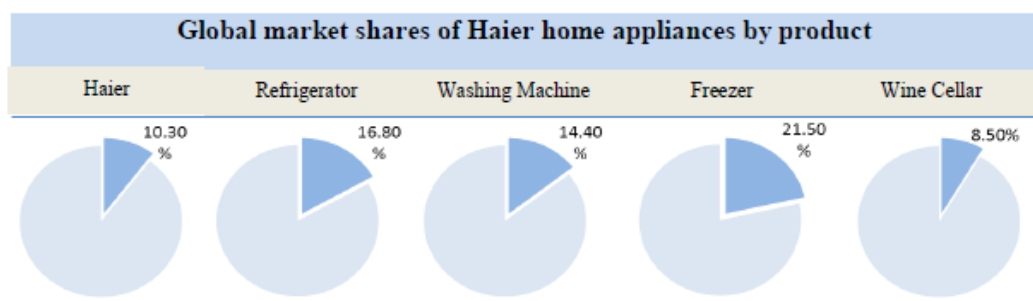
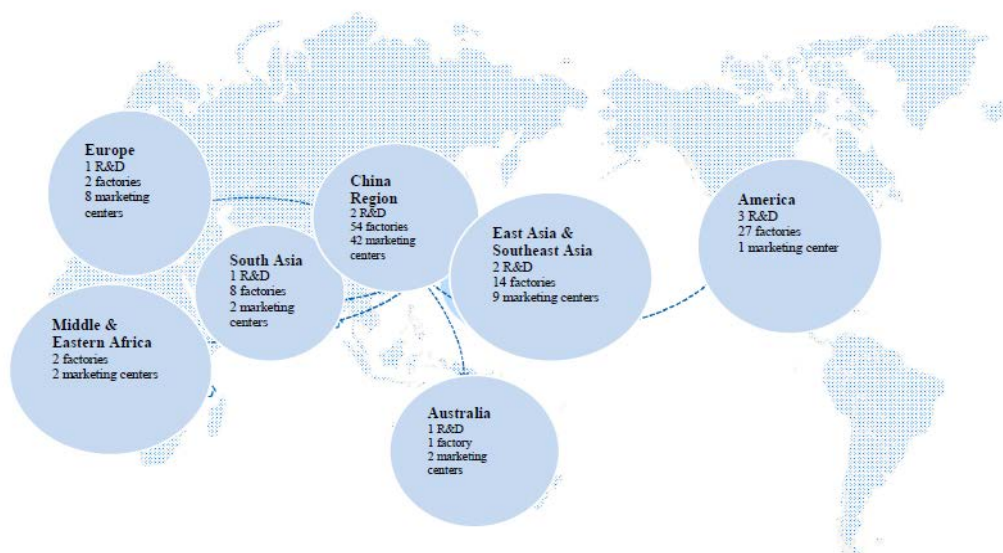
In particular, in 2016, Qingdao Haier acquired General Electric of the United States, and the transaction ended with a purchase price of US\$5.58 billion. Qingdao Haier's acquisition of General Electric Co., Ltd. is not only a big step towards Haier's internationalization, but also a milestone in the history of the development of white goods in China. Qingdao Haier acquired General Electric, which indirectly shows that Qingdao Haier's working capital is generally working well.

Haier have been adhering to the strategy of building own brand independently. Through self-development and mergers and acquisitions, the Company has completed its triple network comprising of R&D, manufacturing and marketing for major overseas markets, which helped us gain insight into and meet the needs of local consumers in a short time. The successful global transformation from single-brand to cross-border and cross-sector multi-brand demonstrated its achievements by going global and developing integrated global resources. As at the end of 2017, its capacity of overseas markets (America, Europe, South Asia and other regions) reached more than 20 million units while revenues from overseas markets in 2017 amounted to 42% with almost 100% generated from self-owned brands.

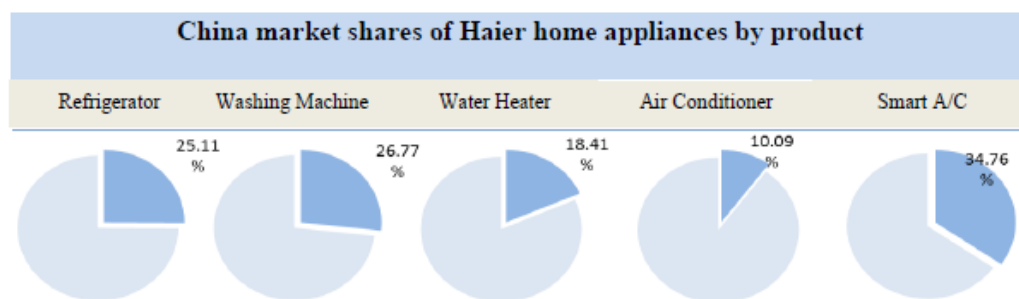
3.2 Haier Working Capital Management Status

The international financial crisis in the evolution of the US subprime mortgage crisis is still under way. Due to the direct impact of the decline in international market demand, the growth rate of China's foreign trade slowed month by month. At the same time, protection measures promulgated by various countries have increased. Governments and industry organizations in some countries have increasingly established various trade and investment barriers for China's export products and enterprises to protect their domestic industries and markets, resulting in a sharp increase in the financial risks of multinational companies. Fund management faces enormous challenges. However, under the background of the global macroeconomic slowdown, low market demand and intensified international competition, the Haier Group's operating fund management performance remains at a relatively good level, successfully avoiding the globalization risk of working capital management. According to Euromonitor International statistics, Haier's global home appliance sales in 2017 increased by 4% year-on-year and sales increased by 6%. From a regional perspective, sales in the Asia Pacific region maintained a 7% increase, which was better than other regions. Middle East Growth 4%. North America, Latin America, Australia, and Europe all increased by 2%. The following charts further show Haier's good working capital management.

years	Account receivable turnover	Inventory turnover	Accounts payable turnover	Working capital turnover rate	Net cash flow from operating activities / Current liabilities
2014	18.4514	8.89555	4.68372	6.10965	0.168314
2015	13.9385	7.35554	4.30676	5.12456	0.14025
2016	13.0171	6.90099	4.65878	21.3117	0.109658
2017	12.8882	5.97414	4.7514	42.1819	0.209203



Source: Euromonitor, in terms of retail volume



Source: CMM, in terms of retail volume

3.3 Haier Group Working Capital Management

3.3.1 Working capital management objectives

Founded in 1984, Haier Group is the world's largest brand of home appliances. In the past 30 years, Haier has always been aiming to create user value, and it has undergone a brand strategy

stage (1984~1991)、diversification strategy stage (1992~1998), internationalization strategy stage (1998~2005), global brand strategy stage (2005~2012) and network strategy stage (2012 to present).

Haier's "globalization strategy" is committed to creating a localized Haier brand in every international market, and creating a "trinity" localization model for design, manufacturing and marketing. At present, Haier has established 29 manufacturing bases in overseas markets including the United States, Europe, India, Pakistan and Thailand, eight integrated R&D centers, and 19 overseas trading companies. Under the buyer's market, the "trinity" localization model can more accurately understand customer needs, thereby developing and producing products and services that meet customer needs, improve product competitiveness, and fundamentally improve working capital management performance.

The internationalization strategy puts forward higher requirements on the quality and response speed of products and meets the challenges brought about by the globalization strategy. Haier implemented the business process reengineering with the "market chain" as a link in 1998, reformed the organizational system, and proposed the "zero working capital" target for working capital management. The goal of "zero working capital" is to minimize working capital through the management and control of the occupation of current assets, especially accounts receivable and inventory, on the premise that enterprises meet the basic needs of current assets. On this basis, Haier has formed a channel-based working capital management ideology, centered on order flow, and the movement of animal and cash flows, accelerated the realization of the "Three Zeros" target of zero user distance, zero inventory of products, and zero working capital, and fundamentally improved the performance of working capital management.

3.3.2 Capital income and expenditure working capital management

Effectively managing overseas funds, Haier Group established overseas Hong Kong cash pool. There are three goals in setting up an overseas cash pool: First, real-time collection of funds from global collection accounts and accelerating cash flow; second, fully assess risks and opportunities in different currencies such as exchange rates, different interest rates, and realize value-added funds; Third, payment accounts are paid based on comprehensive financial budgets, strict internal control of funds, and reasonable and efficient payment of funds through financial budgets. Therefore, the realization of overseas fund management must be supported by two powerful resource systems. One is the global online banking system, and the other is the comprehensive financial budgeting system. Funds revenue and expenditure management requires the standardization of network cooperation banks and accounts. Haier has 2 to 3 cooperative banks, one of which is a local settlement network bank, and the other is a global online bank. And appropriately select a Chinese bank to cope with the impact of political risk on the safety of fund transfer. The bank accounts set up accounts payable, which can be set in local currency, contract currency and managed currency, etc. The customer's order payment is returned to the receiving account, and is automatically collected into the cash pool according to the local bank clearing agreement; according to the budget of financial payment, funds transferred from the headquarters to the payment account to cover the expenses. According to the agreement can also be overdrawn funds payment. After the establishment and implementation of the above global cash pool, Haier Group has realized the payment according to customer orders and paid according to budget. Promoted the improvement of global capital efficiency and played a regulatory role in investment, foreign exchange, financing, etc.

At the same time, all Haier Group sales companies, factories, logistics, etc. open accounts with financial companies. There are strict approval procedures for the opening, changes, closures, etc. of the account, ensuring that all accounts are within the financial company's large system. In addition, it has formed strategic customer partnerships with China Construction Bank and China Merchants Bank. Banks across the country provide the best large customer settlement network support and personalized services. At the end of each month, the SAP Treasury Management System outputs the company's capital budgets, which are shared simultaneously with the financial company's funds payment system. Haier's principle of internal control is "no budget, no payment". The system

automatically locks in and eliminates extrabudgetary payments. In 2007, in response to the need for globalization strategy, the company further reengineered the “informatization” process and promoted the establishment of a financial services sharing service center with IBM. Mainly includes Policy and Evaluation Center, Cash Pool Center, Process Center, Global AR Center, Global AP Center, Risk Management Center, that is powerful supporting for global business and improved corporate competitiveness.

3.3.3 Purchasing, production, and marketing channel operating funds management

1) Purchasing Channel Working Capital Management

From the Haier Group's Purchasing Channel Working Capital Management Performance data, we can see that its turnover period has been negative since 2006. This shows that companies in the procurement channels not only do not own the company's own working capital, but instead become a corporate financing platform. This benefits from the strict management of suppliers by Haier Group and the management model of “financial help business”. Haier Group optimized its supply chain network in 1998 and changed the original supplier system, removed suppliers with unqualified raw material quality, delivery lead time, price, etc., and established strategic partnership with suppliers. At present, Haier's suppliers are basically stable, and the proportion of international suppliers continues to increase. Through continued supply chain improvement, Haier Group has successfully implemented the VMI model in its marketing and procurement channels, greatly improved supply chain integration capabilities, reduced inventory costs, and reduced capital usage. VMI is a family of business models in which the buyer of a product provides certain information to a supplier (vendor) of that product and the supplier takes full responsibility for maintaining an agreed inventory of the material, usually at the buyer's consumption location (usually a store). A third-party logistics provider can also be involved to make sure that the buyer has the required level of inventory by adjusting the demand and supply gaps. By using the Haier VMI model, suppliers can eliminate the need for loading, unloading, warehousing, and other operating procedures, while reducing inventory usage. In the global operation, Haier's strict supplier management laid the foundation for a series of activities such as production and marketing, guaranteed product quality, timely, reduced operational risk, and promoted the improvement of Haier's operating fund management performance.

2) Production channel working capital management

In the production process, Haier Group continues to improve its production model driven by orders, and launched a "zero-delayed order project" to implement the SST mechanism between processes. Promote the efficient and rapid operation of products within the group, shortening the product's stay in the company. And under just-in-time production, enterprises no longer store large amounts of inventory, thereby reducing the working capital occupation of production channels and improving the working capital turnover performance. Continuously improve the logistics organization and operation system, improve the response speed of customer demand, and deliver according to single delivery and order, and effectively link up with the manufacturing process. And put forward concepts such as “cars waiting goods”, achieve direct delivery of products from the production line and reduce the non-value added links between manufacturing and distribution, changing "warehouse" warehouse to "transit station" logistics center, realize PTD (Product To Door) door-to-door delivery. This greatly improves the turnaround efficiency of finished goods inventory and reduces the use of inventory funds.

3) Marketing Channels Working Capital Management

Haier realized the marketing transformation from the traditional marketing to the integration of virtual and real networks. Haier achieves a win-win relationship with channels and users through the combination of virtual networks at zero distance. “Virtual Network” refers to the Internet, which quickly understands and satisfies users' needs through online communities and forms a user's viscosity; "real network" refers to the marketing network, logistics network, and service network, and provides users with products and services that are satisfied by the first time. Under this operating mode, business activities start from customer needs, to product planning, order

forecasting, customer orders, raw materials procurement, production, distribution, and sales. Making enterprises gain advantages in the global competition of “winning by speed”, fundamentally improve the performance of working capital management, and reduce the risks brought by globalization.

In the globalization strategy, Haier has adopted the “big customer direct marketing” business model. The strategic choice of large customers not only greatly reduces the risks brought about by globalization, but also enables Haier to enter the mainstream channels and mainstream markets and realize “going up”, enhance the international influence and appeal of Haier brand. In addition, the direct selling model reduces the delivery time in the middle of the supply chain, reduced the risk of inventory capital and discounts, and improved the management performance of marketing channel working capital. In the management of accounts receivable by overseas customers, Haier implemented the model of “big customer + factoring receivable”, through the factoring of receivables, not only the transfer of risk, but also the focus on the plunder of overseas orders. It also greatly reduced the occupation of operating funds in marketing channels and improved the working capital turnover of marketing channels. Haier expands its overseas market and promotes its "large customer" and "big orders" strategies under the "direct sales direct" model. The "direct sales direct" business model promoted the "zero inventory" goal. The "large customer" strategy enabled Haier to enter the mainstream channels and mainstream markets, and promoted the development of Haier's global strategy.

3.3.4 Financial Management Operational Fund Management

International working capital management mainly includes the following areas: international receivables and credit management, international cash management, international exchange risk management, etc. International receivables management is a long-term issue for most exporters. Haier has solved the problems from unified settlement policies, direct sales of major customers, factoring of receivables, and export credit insurance. Regarding the settlement policy, Haier first unified the global customer settlement policies and business policies of all member companies of the entire group. Haier stipulates that, in principle, the overseas market prefers settlement methods such as sight credits with relatively low risks, at the same time, a unified, global, online payment letter of credit network bank is set up to prevent uncertain risks.

Haier's Hong Kong L/C Pool of Credit is based on a pool of financial instruments supported by a multinational bank L/C professional team and a multinational electronic settlement network. The acceleration of L/C liquidity has evaded bank risks and accelerated cash flow, at the same time, it also avoids the currency exchange risk of RMB appreciation, and rely on DF&NDF and other foreign exchange tools to achieve financial value-added. Haier bill pool innovation, on the one hand to speed up the cash flow; what is more important is to avoid risks, ensure the execution of customer orders, and take advantage of competition with competitors.

In terms of overseas marketing and customer management model innovation, Haier promotes overseas major customer strategy and direct sales direct deliver model to reduce business risks with small-scale customers and customers whose credit rating is less than standard. Increase the proportion of direct sales model to customers, through direct shipments to customers, shorten supply chain links and inventory, accelerate repayment.

In terms of innovation in financial instruments, Haier has promoted the innovation of financial instruments in the combination of factoring and export credit insurance, integrated China's credit insurance companies, multinational banks and other resources, and innovated the model of factoring for receivables. Haier has ranked 2nd and 3rd in market share in India and Pakistan, but the local company's customers are very small, there are no big stores and big chains, customer credit is poor, and international insurance companies (such as Coface, Atridius) refuse to insure. To this end, Haier and CITIC Bank jointly innovate the “Haier+Customer” bond insurance model, and Haier customers can insure insurance companies in China. Through the integration of insurance companies and banks, China Credit Insurance Company has innovatively designed credit insurance products for local customers of Haier Overseas. The insurance company's credit bank bought out

Haier's accounts receivable from overseas, so Haier can realize advance foreign exchange collection, and considering the exchange rate difference caused by the appreciation of the renminbi, the cost of early repayment is very low. In order to effectively manage the working capital of overseas companies, Haier has implemented the management of "separation between revenue and expenditure" in overseas companies around the world, thereby realizing effective control of working capital and accelerating cash flow.

4. Summary

Under the financial crisis, the management of working capital of multinational corporations is of great significance to the survival and development of the company. Haier Group, in a global strategy, is strategically oriented. It has established a channel-based working capital management model in the business operations of procurement, production, and marketing, and has realized the integration of financial services and financial services, and financial business combined management.

The working capital management of a global company is a process of constant innovation and continuous development. Working capital management is the process of high-level strategic decision-making, full-staff participation, and financial overall control evaluation. The main part of the management of working capital is finance. The finance should strictly implement the fund internal control system and promote the management of working capital innovation; at the same time, we must advocate business changes, subvert existing processes, and drive the improvement of working capital competitiveness.

Haier Group pays attention to the guiding position of strategy and has a relatively complete risk management and control system. In the era of financial crisis where cash is king, the center and focus of Haier Group's working capital management is capital. Efforts have been made to focus on funds in all chains, do a good job in pre-warning of risk management and control, emphasize zero risks, and make working capital management win steadily. At the same time, it is difficult to win respect from a customer in the process of globalization. Haier Group has always stood at the other side's position and helped suppliers and customers solve problems. For example, the "finance business" concept of working capital management successfully resolved some working capital turnover problems.

The Haier Group's successful experience in the management of working capital provides a reference for the management of working capital of multinational companies. Enterprises should effectively manage the risk of working capital management and improve their competitiveness in the "going global" pace.

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